STANLEY

GR60 HYDRAULIC GRINDER



USER MANUAL

Safety, Operation and Maintenance



New Britain, CT 06053
U.S.A.
28077 8/2014 Ver. 6

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IMPORTANT

To fill out a Product Warranty Validation form, and for information on your warranty, visit Stanleyhydraulics.com and select the Company tab, Warranty. (NOTE: The warranty Validation record must be submitted to validate the warranty).

SERVICING: This manual contains safety, operation, and routine maintenance instructions. Stanley Hydraulic Tools recommends that servicing of hydraulic tools, other than routine maintenance, must be performed by an authorized and certified dealer. Please read the following warning.

⚠ WARNING

SERIOUS INJURY OR DEATH COULD RESULT FROM THE IMPROPER REPAIR OR SERVICE OF THIS TOOL.

REPAIRS AND / OR SERVICE TO THIS TOOL MUST ONLY BE DONE BY AN AUTHORIZED AND CERTIFIED DEALER.

For the nearest authorized and certified dealer, call Stanley Hydraulic Tools at the number listed on the back of this manual and ask for a Customer Service Representative.

SAFETY SYMBOLS

Safety symbols and signal words, as shown below, are used to emphasize all operator, maintenance and repair actions which, if not strictly followed, could result in a life-threatening situation, bodily injury or damage to equipment.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER	This safety alert and signal word indicate an imminently hazardous situation which, if not avoided, will result in death or serious injury.
WARNING	This safety alert and signal word indicate a potentially hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION	This safety alert and signal word indicate a potentially hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION	This signal word indicates a potentially hazardous situation which, if not avoided, may result in property damage.
NOTICE	This signal word indicates a situation which, if not avoided, will result in damage to the equipment.
IMPORTANT	This signal word indicates a situation which, if not avoided, may result in damage to the equipment.

Always observe safety symbols. They are included for your safety and for the protection of the tool.

LOCAL SAFETY REGULATIONS

Enter any local safety regulations here. Keep these instructions in an area accessible to the operator and maintenance personnel.

SAFETY PRECAUTIONS

Tool operators and maintenance personnel must always comply with the safety precautions given in this manual and on the stickers and tags attached to the tool and hose.

These safety precautions are given for your safety. Review them carefully before operating the tool and before performing general maintenance or repairs.

Supervising personnel should develop additional precautions relating to the specific work area and local safety regulations. If so, place the added precautions in the space provided in this manual.

The GR60 Hydraulic Grinder will provide safe and dependable service if operated in accordance with the instructions given in this manual. Read and understand this manual and any stickers and tags attached to the tool and hoses before operation. Failure to do so could result in personal injury or equipment damage.



• Operator must start in a work area without bystanders. The operator must be familiar with all prohibited work areas such as excessive slopes and dangerous terrain conditions.

• Establish a training program for all operators to ensure safe operation.

• **Warning:** Use of this tool on certain materials during demolition could generate dust potentially containing a variety of hazardous substances such as asbestos, silica or lead. Inhalation of dust containing these or other hazardous substances could result in serious injury, cancer or death. Protect yourself and those around you. Research and understand the materials you are cutting. Follow correct safety procedures and comply with all applicable national, state or provisional health and safety regulations relating to them, including, if appropriate arranging for the safe disposal of the materials by a qualified person.

• Do not operate the tool unless thoroughly trained or under the supervision of an instructor.

• Always wear safety equipment such as goggles, ear and head protection at all times when operating the tool.

• Do not inspect or clean the tool while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury.

• Always connect hoses to the tool hose couplers before energizing the hydraulic power source. Be sure all hose connections are tight.

• Do not operate the tool at oil temperatures above 140°F/60°C. Operation at higher temperatures can cause higher than normal temperatures at the tool which can result in operator discomfort.

SAFETY PRECAUTIONS

• Do not operate a damaged, improperly adjusted or incompletely assembled tool.

• To avoid personal injury or equipment damage, all tool repair, maintenance and service must only be performed by authorized and properly trained personnel.

• Always replace parts with replacement parts recommended by Stanley Hydraulic Tools.

• Do not operate the tool with the wheel guard removed.

• Never wear loose clothing that can get entangled in the working parts of the tool.

• Keep all parts of your body away from the rotating wheel. Long hair or loose clothing can become drawn into rotating-components.

• Do not overreach. Maintain proper footing and balance at all times.

• Keep the wheel off all surfaces when starting the grinder.

• Always hold the tool with both hands when the unit is running. Use a firm grip.

• Keep all parts of your body away from the rotating wheel.

TOOL STICKERS & TAGS

STANLEY®
Stanley Hydraulic Tools
3810 SE Naef Rd
Milwaukie, Oregon 97267 U.S.A.
Model No.
GR60

P/N-25791
Name Tag

CAUTION
PROTECT YOUR EYES
WEAR SAFETY GOGGLES

1. DO NOT USE DAMAGED WHEELS.
2. USE ONLY WHEELS THAT MEET REQUIREMENTS OF ANSI B7.1,B7.5, ISO 525,603
3. WHEELS SHOULD BE NO LARGER THAN 6"x 3"x 5/8–11 THREAD, RATED FOR AT LEAST 6000 RPM OPERATING SPEED.
4. INSPECT GUARD AND MOUNTING FLANGE FOR DAMAGE AFTER ANY WHEEL BREAKAGE ON THE MACHINE.
5. SPINDLE SPEED, 4000 RPM.
6. READ OPERATION MANUAL

ROTATION DIRECTION

P/N-25790
Caution Sticker

STANLEY® RAILROAD HELP DESK
1-800-549-0517
FOR CUSTOMER SERVICE OR TECHNICAL QUESTIONS

P/N-25610
Railroad Help Desk Sticker

STANLEY®
Stanley Hydraulic tools
Division of the Stanley Works
3810 SE Naef Road
Milwaukie, OR 97267

P/N-05152
Stanley Sticker

CAUTION

7-10 GPM / 26-34 LPM
DO NOT EXCEED 2000 PSI / 140 BAR

DO NOT EXCEED SPECIFIED FLOW OR PRESSURE USE CLOSED-CENTER TOOL ON CLOSED-CENTER SYSTEM. USE OPEN-CENTER TOOL ON OPEN-CENTER SYSTEM. CORRECTLY CONNECT HOSES TO TOOL "IN" AND "OUT" PORTS. IMPROPER HANDLING, USE OR OTHER MAINTENANCE OF TOOL COULD RESULT IN A LEAK, BURST OR OTHER TOOL FAILURE. CONTACT AT A LEAK OR BURST CAN CAUSE OIL INJECTION INTO THE BODY. FAILURE TO OBSERVE THESE PRECAUTIONS CAN RESULT IN SERIOUS PERSONAL INJURY.

P/N-03787
GPM Sticker

NOTE:

THE INFORMATION LISTED ON THE STICKERS SHOWN, MUST BE LEGIBLE AT ALL TIMES.

REPLACE DECALS IF THEY BECOME WORN OR DAMAGED. REPLACEMENTS ARE AVAILABLE FROM YOUR LOCAL STANLEY DISTRIBUTOR.

The safety tag (P/N 15875) at right is attached to the tool when shipped from the factory. Read and understand the safety instructions listed on this tag before removal. We suggest you retain this tag and attach it to the tool when not in use.

DANGER

1. FAILURE TO USE HYDRAULIC HOSE LABELED AND CERTIFIED AS NON-CONDUCTIVE WHEN USING HYDRAULIC TOOLS ON OR NEAR ELECTRICAL LINES MAY RESULT IN DEATH OR SERIOUS INJURY.

   BEFORE USING HOSE **LABELED AND CERTIFIED AS NON-CONDUCTIVE** ON OR NEAR ELECTRIC LINES BE SURE THE HOSE IS **MAINTAINED AS NON-CONDUCTIVE**. THE HOSE SHOULD BE REGULARLY TESTED FOR ELECTRIC CURRENT LEAKAGE IN ACCORDANCE WITH YOUR SAFETY DEPARTMENT INSTRUCTIONS.

2. A HYDRAULIC LEAK OR BURST MAY CAUSE OIL INJECTION INTO THE BODY OR CAUSE OTHER SEVERE PERSONAL INJURY.
   A. **DO NOT** EXCEED SPECIFIED FLOW AND PRESSURE FOR THIS TOOL. EXCESS FLOW OR PRESSURE MAY CAUSE A LEAK OR BURST.
   B. **DO NOT** EXCEED RATED WORKING PRESSURE OF HYDRAULIC HOSE USED WITH THIS TOOL. EXCESS PRESSURE MAY CAUSE A LEAK OR BURST.
   C. CHECK TOOL HOSE COUPLERS AND CONNECTORS DAILY FOR LEAKS. **DO NOT** FEEL FOR LEAKS WITH YOUR HANDS. CONTACT WITH A LEAK MAY RESULT IN SEVERE PERSONAL INJURY.

IMPORTANT

READ OPERATION MANUAL AND SAFETY INSTRUCTIONS FOR THIS TOOL BEFORE USING IT.

USE ONLY PARTS AND REPAIR PROCEDURES APPROVED BY STANLEY AND DESCRIBED IN THE OPERATION MANUAL.

TAG TO BE REMOVED ONLY BY TOOL OPERATOR.

SEE OTHER SIDE

DANGER

D. DO NOT LIFT OR CARRY TOOL BY THE HOSES. DO NOT ABUSE HOSE. DO NOT USE KINKED, TORN OR DAMAGED HOSE.

3. MAKE SURE HYDRAULIC HOSES ARE PROPERLY CONNECTED TO THE TOOL BEFORE PRESSURING SYSTEM. SYSTEM PRESSURE HOSE MUST ALWAYS BE CONNECTED TO TOOL "IN" PORT. SYSTEM RETURN HOSE MUST ALWAYS BE CONNECTED TO TOOL "OUT" PORT. REVERSING CONNECTIONS MAY CAUSE REVERSE TOOL OPERATION WHICH CAN RESULT IN SEVERE PERSONAL INJURY.
4. DO NOT CONNECT OPEN-CENTER TOOLS TO CLOSED-CENTER HYDRAULIC SYSTEMS. THIS MAY RESULT IN LOSS OF OTHER HYDRAULIC FUNCTIONS POWERED BY THE SAME SYSTEM AND/OR SEVERE PERSONAL INJURY.
5. BYSTANDERS MAY BE INJURED IN YOUR WORK AREA. KEEP BYSTANDERS CLEAR OF YOUR WORK AREA.
6. WEAR HEARING, EYE, FOOT, HAND AND HEAD PROTECTION.
7. TO AVOID PERSONAL INJURY OR EQUIPMENT DAMAGE, ALL TOOL REPAIR MAINTENANCE AND SERVICE MUST ONLY BE PERFORMED BY AUTHORIZED AND PROPERLY TRAINED PERSONNEL.

IMPORTANT

READ OPERATION MANUAL AND SAFETY INSTRUCTIONS FOR THIS TOOL BEFORE USING IT.

USE ONLY PARTS AND REPAIR PROCEDURES APPROVED BY STANLEY AND DESCRIBED IN THE OPERATION MANUAL.

TAG TO BE REMOVED ONLY BY TOOL OPERATOR.

SEE OTHER SIDE

SAFETY TAG P/N 15875 (Shown smaller then actual size)

HOSE TYPES

The rated working pressure of the hydraulic hose must be equal to or higher than the relief valve setting on the hydraulic system. There are three types of hydraulic hose that meet this requirement and are authorized for use with Stanley Hydraulic Tools. They are:

Certified non-conductive — constructed of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. *Hose labeled **certified non-conductive** is the only hose authorized for use near electrical conductors.*

Wire-braided (conductive) — constructed of synthetic rubber inner tube, single or double wire braid reinforcement, and weather resistant synthetic rubber cover. *This hose is **conductive** and must never be used near electrical conductors.*

Fabric-braided (not certified or labeled non-conductive) — constructed of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. *This hose is **not certified non-conductive** and must never be used near electrical conductors.*

HOSE SAFETY TAGS

To help ensure your safety, the following DANGER tags are attached to all hose purchased from Stanley Hydraulic Tools. DO NOT REMOVE THESE TAGS.

If the information on a tag is illegible because of wear or damage, replace the tag immediately. A new tag may be obtained from your Stanley Distributor.

THE TAG SHOWN BELOW IS ATTACHED TO "CERTIFIED NON-CONDUCTIVE" HOSE

DO NOT REMOVE THIS TAG

DANGER

1. FAILURE TO USE HYDRAULIC HOSE LABELED AND CERTIFIED AS NON-CONDUCTIVE WHEN USING HYDRAULIC TOOLS ON OR NEAR ELECTRIC LINES MAY RESULT IN DEATH OR SERIOUS INJURY.

   FOR PROPER AND SAFE OPERATION MAKE SURE THAT YOU HAVE BEEN PROPERLY TRAINED IN CORRECT PROCEDURES REQUIRED FOR WORK ON OR AROUND ELECTRIC LINES.
2. BEFORE USING HYDRAULIC HOSE LABELED AND CERTIFIED AS NON-CONDUCTIVE ON OR NEAR ELECTRIC LINES. WIPE THE ENTIRE LENGTH OF THE HOSE AND FITTING WITH A CLEAN DRY ABSORBENT CLOTH TO REMOVE DIRT AND MOISTURE AND TEST HOSE FOR MAXIMUM ALLOWABLE CURRENT LEAKAGE IN ACCORDANCE WITH SAFETY DEPARTMENT INSTRUCTIONS.

SEE OTHER SIDE

SIDE 1

DANGER

3. **DO NOT** EXCEED HOSE WORKING PRESSURE OR ABUSE HOSE. IMPROPER USE OR HANDLING OF HOSE COULD RESULT IN BURST OR OTHER HOSE FAILURE. KEEP HOSE AS FAR AWAY AS POSSIBLE FROM BODY AND **DO NOT** PERMIT DIRECT CONTACT DURING USE. CONTACT AT THE BURST CAN CAUSE BODILY INJECTION AND SEVERE PERSONAL INJURY.
4. HANDLE AND ROUTE HOSE CAREFULLY TO AVOID KINKING, ABRASION, CUTTING, OR CONTACT WITH HIGH TEMPERATURE SURFACES. **DO NOT** USE IF KINKED. **DO NOT** USE HOSE TO PULL OR LIFT TOOLS, POWER UNITS, ETC.
5. CHECK ENTIRE HOSE FOR CUTS CRACKS LEAKS ABRASIONS, BULGES, OR DAMAGE TO COUPLINGS IF ANY OF THESE CONDITIONS EXIST, REPLACE THE HOSE IMMEDIATELY. NEVER USE TAPE OR ANY DEVICE TO ATTEMPT TO MEND THE HOSE.
6. AFTER EACH USE STORE IN A CLEAN DRY AREA.

SEE OTHER SIDE

DO NOT REMOVE THIS TAG

SIDE 2

(Shown smaller than actual size)

THE TAG SHOWN BELOW IS ATTACHED TO "CONDUCTIVE" HOSE.

DO NOT REMOVE THIS TAG

DANGER

1. DO NOT USE THIS HYDRAULIC HOSE ON OR NEAR ELECTRIC LINES. THIS HOSE IS NOT LABELED OR CERTIFIED AS NON-CONDUCTIVE. USING THIS HOSE ON OR NEAR ELECTRICAL LINES MAY RESULT IN DEATH OR SERIOUS INJURY.
2. FOR PROPER AND SAFE OPERATION MAKE SURE THAT YOU HAVE BEEN PROPERLY TRAINED IN CORRECT PROCEDURES REQUIRED FOR WORK ON OR AROUND ELECTRIC LINES.
3. **DO NOT** EXCEED HOSE WORKING PRESSURE OR ABUSE HOSE. IMPROPER USE OR HANDLING OF HOSE COULD RESULT IN BURST OR OTHER HOSE FAILURE. KEEP HOSE AS FAR AWAY AS POSSIBLE FROM BODY AND **DO NOT** PERMIT DIRECT CONTACT DURING USE. CONTACT AT THE BURST CAN CAUSE BODILY INJECTION AND SEVERE PERSONAL INJURY.
4. HANDLE AND ROUTE HOSE CAREFULLY TO AVOID KINKING, CUTTING, OR CONTACT WITH HIGH TEMPERATURE SURFACES. **DO NOT** USE IF KINKED. **DO NOT** USE HOSE TO PULL OR LIFT TOOLS, POWER UNITS, ETC.

SEE OTHER SIDE

SIDE 1

DANGER

5. CHECK ENTIRE HOSE FOR CUTS CRACKS LEAKS ABRASIONS, BULGES, OR DAMAGE TO COUPLINGS IF ANY OF THESE CONDITIONS EXIST, REPLACE THE HOSE IMMEDIATELY. NEVER USE TAPE OR ANY DEVICE TO ATTEMPT TO MEND THE HOSE.
6. AFTER EACH USE STORE IN A CLEAN DRY AREA.

SEE OTHER SIDE

DO NOT REMOVE THIS TAG

SIDE 2

(Shown smaller than actual size)

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Tool to Hydraulic Circuit Hose Recommendations

The chart to the right shows recommended minimum hose diameters for various hose lengths based on gallons per minute (gpm)/ liters per minute (lpm). These recommendations are intended to keep return line pressure (back pressure) to a minimum acceptable level to ensure maximum tool performance.

This chart is intended to be used for hydraulic tool applications only based on Stanley Hydraulic Tools tool operating requirements and should not be used for any other applications.

All hydraulic hose must have at least a rated minimum working pressure equal to the maximum hydraulic system relief valve setting.

All hydraulic hose must meet or exceed specifications as set forth by SAE J517.

Oil Flow		Hose Lengths		Inside Diameter		USE	Min. Working Pressure	
GPM	LPM	FEET	METERS	INCH	MM	(Press/Return)	PSI	BAR
Certified Non-Conductive Hose - Fiber Braid - for Utility Bucket Trucks								
4-9	15-34	up to 10	up to 3	3/8	10	Both	2250	155
Conductive Hose - Wire Braid or Fiber Braid -DO NOT USE NEAR ELECTRICAL CONDUCTORS								
4-6	15-23	up to 25	up to 7.5	3/8	10	Both	2500	175
4-6	15-23	26-100	7.5-30	1/2	13	Both	2500	175
5-10.5	19-40	up to 50	up to 15	1/2	13	Both	2500	175
5-10.5	19-40	51-100	15-30	5/8	16	Both	2500	175
5-10.5	19-40	100-300	30-90	5/8	16	Pressure	2500	175
				3/4	19	Return	2500	175
10-13	38-49	up to 50	up to 15	5/8	16	Both	2500	175
10-13	38-49	51-100	15-30	5/8	16	Pressure	2500	175
				3/4	19	Return	2500	175
10-13	38-49	100-200	30-60	3/4	19	Pressure	2500	175
				1	25.4	Return	2500	175
13-16	49-60	up to 25	up to 8	5/8	16	Pressure	2500	175
				3/4	19	Return	2500	175
13-16	49-60	26-100	8-30	3/4	19	Pressure	2500	175
				1	25.4	Return	2500	175

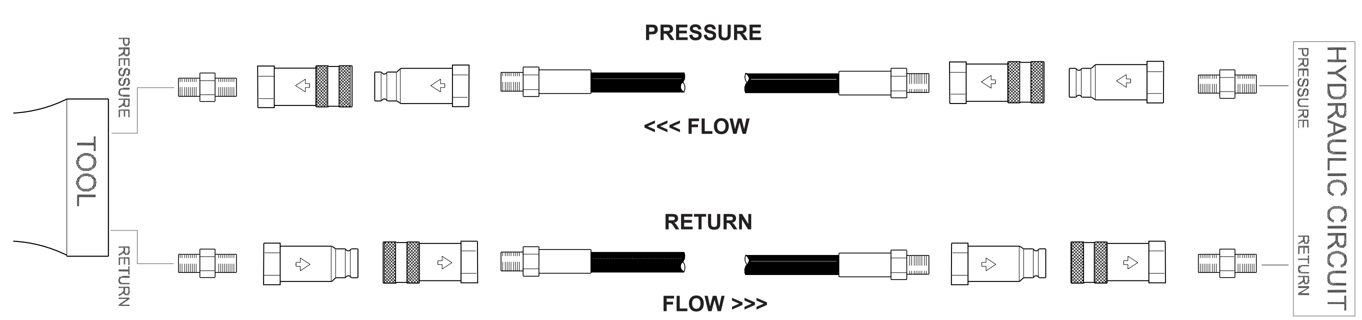


Figure 1. Typical Hose Connections

HTMA / EHTMA REQUIREMENTS

HTMA HYDRAULIC SYSTEM REQUIREMENTS	TOOL TYPE TYPE I	TYPE II	TYPE RR	TYPE III
Flow Range Nominal Operating Pressure (at the power supply outlet)	4-6 gpm (15-23 lpm) 1500 psi (103 bar)	7-9 gpm (26-34 lpm) 1500 psi (103 bar)	9-10.5 gpm (34-40 lpm) 1500 psi (103 bar)	11-13 gpm (42-49 lpm) 1500 psi (103 bar)
System relief valve setting (at the power supply outlet)	2100-2250 psi (145-155 bar)	2100-2250 psi (145-155 bar)	2200-2300 psi (152-159 bar)	2100-2250 psi (145-155 bar)
Maximum back pressure (at tool end of the return hose)	250 psi (17 bar)	250 psi (17 bar)	250 psi (17 bar)	250 psi (17 bar)
Measured at a max. fluid viscosity of: (at min. operating temperature)	400 ssu* (82 centistokes)	400 ssu* (82 centistokes)	400 ssu* (82 centistokes)	400 ssu* (82 centistokes)
Temperature: Sufficient heat rejection capacity to limit max. fluid temperature to: (at max. expected ambient temperature)	140° F (60° C)	140° F (60° C)	140° F (60° C)	140° F (60° C)
Min. cooling capacity at a temperature difference of between ambient and fluid temps	3 hp (2.24 kW) 40° F (22° C)	5 hp (3.73 kW) 40° F (22° C)	6 hp (5.22 kW) 40° F (22° C)	7 hp (4.47 kW) 40° F (22° C)
NOTE: Do not operate the tool at oil temperatures above 140° F (60° C). Operation at higher temperatures can cause operator discomfort at the tool.				
Filter Min. full-flow filtration Sized for flow of at least: (For cold temp. startup and max. dirt-holding capacity)	25 microns 30 gpm (114 lpm)	25 microns 30 gpm (114 lpm)	25 microns 30 gpm (114 lpm)	25 microns 30 gpm (114 lpm)
Hydraulic fluid Petroleum based (premium grade, anti-wear, non-conductive) Viscosity (at min. and max. operating temps)	100-400 ssu*	100-400 ssu* (20-82 centistokes)	100-400 ssu*	100-400 ssu*

NOTE:
When choosing hydraulic fluid, the expected oil temperature extremes that will be experienced in service determine the most suitable temperature viscosity characteristics. Hydraulic fluids with a viscosity index over 140 will meet the requirements over a wide range of operating temperatures.

*SSU = Saybolt Seconds Universal

EHTMA HYDRAULIC SYSTEM REQUIREMENTS	CLASSIFICATION B 15Lpm at 138bar EHTMA CATEGORY	C 20Lpm at 138bar EHTMA CATEGORY	D 30Lpm at 138bar EHTMA CATEGORY	E 40Lpm at 138bar EHTMA CATEGORY	F 50Lpm at 138bar EHTMA CATEGORY
Flow Range Nominal Operating Pressure (at the power supply outlet)	3.5-4.3 gpm (13.5-16.5 lpm) 1870 psi (129 bar)	4.7-5.8 gpm (18-22 lpm) 1500 psi (103 bar)	7.1-8.7 gpm (27-33 lpm) 1500 psi (103 bar)	9.5-11.6 gpm (36-44 lpm) 1500 psi (103 bar)	11.8-14.5 gpm (45-55 lpm) 1500 psi (103 bar)
System relief valve setting (at the power supply outlet)	2495 psi (172 bar)	2000 psi (138 bar)	2000 psi (138 bar)	2000 psi (138 bar)	2000 psi (138 bar)

NOTE: These are general hydraulic system requirements. See tool specification page for tool specific requirements

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PREOPERATION PROCEDURES

Each unit as shipped has no special unpacking or assembly requirements prior to usage. Inspection to assure the unit was not damaged in shipping and does not contain packing debris is all that is required. After installation of a grinding wheel a unit may be put to use.

CHECK HYDRAULIC POWER SOURCE

1. Using a calibrated flowmeter and pressure gauge, check that the hydraulic power source develops a flow of 7-10 gpm/26-38 lpm at 1500-2000 psi/105-140 bar.

2. Make certain the hydraulic power source is equipped with a relief valve set to open at 2100-2250 psi/145-155 bar minimum.

3. Check that the hydraulic circuit matches the tool for open-center (OC) or closed-center (CC) operation.

CHECK TOOL

1. Make sure all tool accessories are correctly installed. Failure to install tool accessories properly can result in damage to the tool or personal injury.

2. There should be no signs of leaks.

3. The tool should be clean, with all fittings and fasteners tight.

CHECK TRIGGER MECHANISM

1. Check that the trigger operates smoothly and is free to travel between the “ON” and “OFF” positions.

CHECK GUARD ASSEMBLY

1. Inspect the wheel guard assembly for cracks and other structural damage.

INSTALLING AND REMOVING GRINDING WHEELS

READ AND BECOME FAMILIAR WITH THE SECTIONS IN THIS MANUAL ON SAFETY PRECAUTIONS, TOOL STICKERS AND TAGS, HYDRAULIC HOSE REQUIREMENTS, HYDRAULIC REQUIREMENTS, AND PREOPERATION PROCEDURES BEFORE USING THIS PRODUCT.

IMPORTANT

Never over-tighten the grinding wheel by impacting the wrench with a mallet or hammer. Sufficient torque is attained by hand-tightening the wheel with a strap wrench or for wheels secured with capscrews, hand tightening with a socket wrench while depressing the push lock.

NOTE:

Use 6-inch diameter up to 3-inch thick (Type 6 for USA/Type 36 for CE) grinding wheels with a 5/8-11 threaded arbor hole. Only use grinding wheels which comply with ANSI B7.5/ISO 525, 603.

1. Depress the push lock (6) and screw the grinding wheel onto the main shaft (13) and tighten using a strap wrench.

2. Adjust guard to desired height.

CONNECT HOSES

1. Wipe all hose couplers with a clean lint-free cloth before making connections.

2. Connect the hoses from the hydraulic power source to the hose couplers on the grinder. It is a good practice to connect the return hose first and disconnect it last to minimize or avoid trapped pressure within the grinder motor.

3. Observe flow indicators stamped on hose couplers to be sure that oil will flow in the proper direction. The female coupler is the inlet coupler.

NOTE:

The pressure increase in uncoupled hoses left in the sun may result in making them difficult to connect. When possible, connect the free ends of operating hoses together.

OPERATING PROCEDURES

1. Observe all safety precautions.

2. Always start the grinder with the grinding wheel away from the work surface.

3. Move the hydraulic circuit control valve to the “ON” position.

4. Disengage the safety thumb latch (42) and squeeze the trigger momentarily. If the grinder does not operate, the hoses might be reversed. Verify correct connection of the hoses before continuing.

5. Start the grinder and move the grinding wheel or cone to the work surface.

6. Grind a small amount of material at a time.

7. As the grinding stone wears, adjust guard height by depressing the guard latch (26) and rotate the guard to lower or raise height.

COLD WEATHER OPERATION

If the grinder is to be used during cold weather, preheat the hydraulic fluid at low engine speed. When using the normally recommended fluids, fluid temperature should be at or above 50° F/10° C (400 ssu/82 centistokes) before use.

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TROUBLESHOOTING

If symptoms of poor performance develop, the following chart can be used as a guide to correct the problem.

When diagnosing faults in operation of the grinder, always check that the hydraulic power source is supplying the correct hydraulic flow and pressure to the grinder as listed in the table. Use a flowmeter known to be accurate. Check the flow with the hydraulic oil temperature at least 80°F/27°C.

Grinder does not run	Hydraulic power source not functioning.	Check power source for proper flow and pressure (7-10 gpm/ 26-38 lpm @ 1500-2000 psi/ 105-140 bar.
	Couplers or hoses blocked.	Locate and remove restriction.
	Hydraulic motor failure.	Inspect and repair.
	Hydraulic lines not connected.	Connect lines.
Grinder operates too slow.	Hydraulic motor speed to slow.	Check power unit for proper flow (7-10 gpm/26-38 lpm).
	High backpressure.	Check hydraulic system for excessive back-pressure (over 250 psi/17 bar).
	Couplers or hoses blocked.	Locate and remove restriction.
	Oil too hot (above 140°F/60°C) or too cold (below 60°F/16°C).	Check hydraulic power source for proper oil temperature. Bypass cooler to warm oil or provide cooler to maintain proper temperature.
	Relief valve set too low.	Adjust relief valve to 2100-2250 psi/145-155 bar.
	Hydraulic motor worn.	Inspect, repair or replace.
	Flow control malfunctioning.	Have flow control serviced at an authorized Stanley service center.
Grinder operates too fast.	Flow control malfunctioning.	Have flow control and valve body serviced at an authorized Stanley service center.

TOOL PROTECTION & CARE

NOTICE

In addition to the Safety Precautions found in this manual, observe the following for equipment protection and care.

- Make sure all couplers are wiped clean before connection.
- The hydraulic circuit control valve must be in the "OFF" position when coupling or uncoupling hydraulic tools. Failure to do so may result in damage to the quick couplers and cause overheating of the hydraulic system.
- Always store the tool in a clean dry space, safe from damage or pilferage.
- Make sure the circuit PRESSURE hose (with male quick disconnect) is connected to the "IN" port. The circuit RETURN hose (with female quick disconnect) is connected to the opposite port. Do not reverse circuit flow. This can cause damage to internal seals.
- Always replace hoses, couplings and other parts with replacement parts recommended by Stanley Hydraulic Tools. Supply hoses must have a minimum working pressure rating of 2500 psi/172 bar.
- Do not exceed the rated flow (see Specifications) in this manual for correct flow rate and model number. Rapid failure of the internal seals may result.
- Always keep critical tool markings, such as warning stickers and tags legible.
- Tool repair should be performed by experienced personnel only.
- Make certain that the recommended relief valves are installed in the pressure side of the system.
- Do not use the tool for applications for which it was not intended.

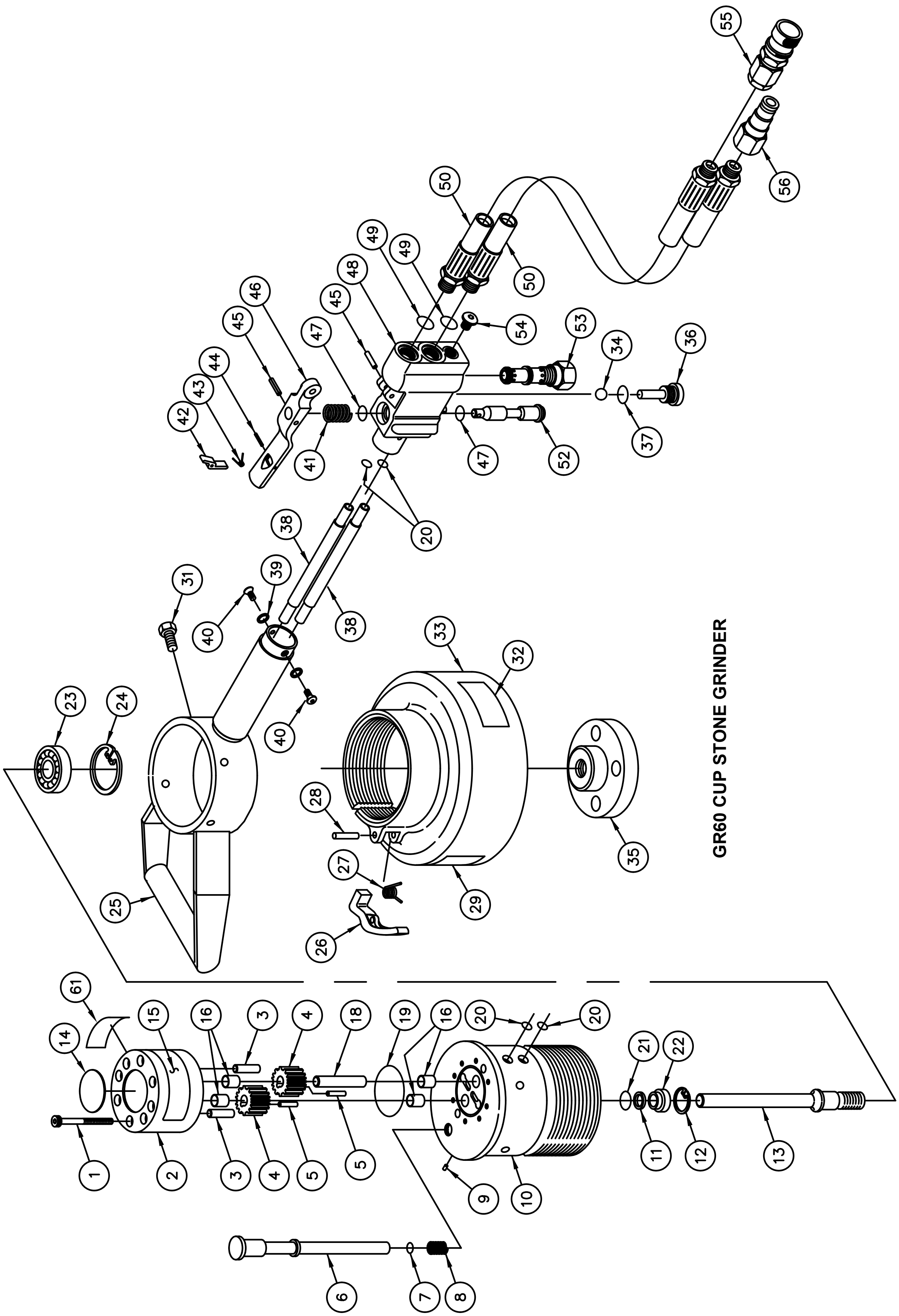
SPECIFICATIONS

Wheel Capacity	6 inch dia. x 3 inch thick x 5/8-11 threaded arbor (Type 6) USA
	150 mm x 60 mm x 5/8-11 threaded arbor (Type 36) CE
Pressure Range	1000-2000 psi / 70-140 bar
Maximum Back Pressure	250 psi / 17 bar
Flow Range	7-10 gpm / 26-38 lpm
Porting	-8 SAE O-Ring
Couplers	EHTMA / HTMA Flush Face Type Male & Female
Connect Size & Type	3/8 inch Male Pipe Adapter
Hose Whips	Yes
Overall Length (w/o Hose Whips)	18 inches / 45.7 cm
Overall Width	10.5 inches / 26.7 cm
Weight (w/couplers)	20.3 lbs / 9.2 kg
Maximum Fluid Temperature	140° F / 60° C
RPM	4000 Max

ACCESSORIES

Cup Stone Grinding Wheel (6 inch x 3 inch x 5/8-11 Norton Norzon IV)	28597

GR60 PARTS ILLUSTRATION



STANLEY.

GR60 PARTS LIST

ITEM NO.	PART NO.	QTY	DESCRIPTION
1	00120	8	CAPSCREW
2	25188	1	GEAR CHAMBER ASSY
3	0713	2	DOWEL PIN
4	25718	2	DRIVE GEAR
5	06881	2	NEEDLE ROLLER
6	25612	1	PUSH LOCK
7	00354	1	O-RING
8	25788	1	COIL SPRING
9	02837	1	SET SCREW
10	25792	1	SHAFT HOUSING ASSY
11	00214	1	QUAD RING
12	00170	1	RETAINING RING
13	28127	1	MAIN SHAFT
14	25791	1	NAME TAG
15	03787	1	GPM STICKER
16	06316	4	BUSHING
18	73308	1	IDLER SHAFT KEYED
19	00178	1	O-RING
20	00018	4	O-RING
21	350771	1	O-RING
22	30333	1	SEAL GLAND
23	25947	1	BEARING
24	00633	1	RETAINING RING
25	31822	1	ASSIST HANDLE ASSY
26	25121	1	GUARD LATCH
27	25464	1	SPRING
28	17668	1	ROLL PIN
29	05152	1	STANLEY STICKER
30	----	--	NO ITEM
31	02525	4	CAPSCREW
32	25610	1	RAILROAD HELP DESK DECAL
33	25783	1	GUARD ASSY (INCLUDES ITEMS 26, 27 & 28)
34	20145	1	STEEL BALL
35	25784	1	DRIVE FLANGE
36	24289	1	PLUG
37	01411	1	O-RING
38	25215	2	OIL TUBE
39	00032	2	LOCK WASHER
40	30366	2	CAPSCREW

ITEM NO.	PART NO.	QTY	DESCRIPTION
41	04097	1	SPRING
42	27441	1	THUMB LATCH
43	27445	1	SPRING
44	01851	1	ROLL PIN
45	00114	2	ROLL PIN
46	27442	1	TRIGGER
	27594	1	TRIGGER ASSY (INCL. 42-44, 46)
47	01211	2	O-RING
48	28595	1	VALVE BODY ASSY (INCL 34, 36-37)
49	01605	1	O-RING
50	25618	2	HOSE ASSY (GR601215C)
	58630	2	HOSE ASSY (GR60212S)
	66728	2	HOSE ASSY (GR60121B)
51	----	--	NO ITEM
52	04098	1	VALVE SPOOL ASSY
53	28914	1	FLOW REGULATOR CAR-TRIDGE (PRE-SET)
54	350041	1	PLUG
55	03972	1	FEMALE COUPLER BODY (GR601215, GR601215C)
	47436	1	FEMALE COUPLER BODY (GR60121B)
56	03973	1	MALE COUPLER BODY (GR601215, GR601215C)
	47437	1	MALE COUPLER BODY (GR60121B)
61	25790	1	CAUTION STICKER
	28967	**1**	SEAL KIT (INCL. 7, 11, 19-21, 47, 49)

STANLEY®

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